

REMARKS

Reconsideration and withdrawal of the objections and rejections set forth in the above-mentioned Office Action are requested in view of the foregoing amendments and the following remarks.

Claims 1, 3, 4, 9, 11, 12, and 22-26 remain pending in the application, with claims 1 and 12 being independent. Claims 5 and 10 have been cancelled without prejudice, and claims 1, 9, 12, and 26 have been amended herein. Support for the amendments may be found in the application, as filed. No new matter has been added.

The specification was objected to in the Office Action, because Applicant's representative inadvertently deleted a paragraph from the application in the paper filed October 3, 2005. Applicant agrees that this paragraph was inadvertently omitted, and the paragraph, incorporating the amendment that was intended to previously have been made, has been re-introduced to the specification by this amendment. Favorable consideration is requested.

The Office Action also objected to claims 1, 5, and 12, because "on a side" should allegedly read "on one side." Without conceding the propriety of this objection, the objected-to language has been removed from claims 1 and 12, and claim 5 has been canceled. Withdrawal of the objection is accordingly requested.

Claims 1, 3-5, 9, 11, 12, and 22-25 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,625,303 (Young et al. '303). Claim 26 was rejected under 35 U.S.C. § 103 as being unpatentable over Young et al. '303 in view of U.S. Patent No. 6,249,590 (Young et al. '590). These rejections are respectfully traversed.

As recited in claim 1, Applicant's invention relates to an image processing apparatus for processing a photographed image of a body including a neck region. The apparatus includes an object extracting portion, a region extracting portion, an analyzing portion, and a gradation conversion portion. The object extracting portion is configured to extract a body region from the photographed image. The region extracting portion is configured to extract a region including a cervical spine as a predetermined region on a line segment connecting a pixel showing a maximum value on a contour on one side of the body region and a pixel showing a maximum value on a contour on the other side of the body region. The analyzing portion is configured to calculate a statistics value from the predetermined region. The gradation conversion portion is configured to execute a gradation conversion processing on the photographed image based on the statistics value.

In another aspect of Applicant's invention, independent claim 12 relates to an image processing method including steps that generally correspond to the features of independent claim 1.

Applicant submits that many of these claimed features are not taught or suggested by the cited patents.

Young et al. '303 relates to a method for automatically locating an image pattern in digital images using eigenvector analysis. More specifically, Applicant understands that patent to teach that a region is extracted using opposite ends of a bone as reference positions. However, nowhere is Young et al. '303 understood to teach or suggest extracting a region including a cervical spine as a predetermined region on a line segment connecting a pixel showing a maximum value on a contour on one side of the body region

and a pixel showing a maximum value on a contour on the other side of the body region, as recited in independent claims 1 and 12. For example, according to Applicant's invention, it is possible to stably and easily extract a region including the cervical spine region as the predetermined region, even in a posture in which the neck region is surrounded by the head and/or shoulder region.

For the foregoing reasons, Applicant submits that Young et al. '303 fails to teach or suggest important features of the present invention recited in independent claims 1 and 12. Young et al. '590 is understood to be cited merely for teaching features of a dependent claim. Without conceding the propriety of the Office Action's characterization of Young et al. '590, Applicant submits that patent does nothing to remedy the deficiencies of Young et al. '303, discussed above.

Thus, Applicant submits that claims 1 and 12 recite features that patentably define Applicant's invention over the cited patents. Favorable reconsideration and withdrawal of the outstanding rejection of claims 1 and 12 are requested.

The remaining claims depend from one of the independent claims, and are believed to be allowable by virtue of this dependency, as well as for reciting other patentable features of Applicant's invention. Favorable and continued independent consideration of the dependent claims are requested.

Applicant submits that the present application is in condition for allowance. Favorable reconsideration, withdrawal of the rejections set forth in the above-noted Office Action, and an early Notice of Allowability are requested.

This Amendment After Final Rejection does not raise new issues, is an earnest attempt to advance prosecution and reduce the number of issues, and is believed to clearly place this application in condition for allowance. This Amendment was not earlier presented because Applicant earnestly believed that the prior Amendment placed the subject application in condition for allowance. Accordingly, entry of this Amendment under 37 CFR 1.116 is respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'M. J. Didas', is written over a horizontal line.

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